AMENDMENT

In the Abstract:

Please replace the abstract with the following paragraph:

-- The invention relates to a polarized light fluorescence imaging device comprising a structure of parallel microchannels for containing the constituents to be analyzed. A coupling device enables polarized light to be guided into the microchannels. The invention is applied to the analysis of labeled nucleic acid sequences.--

In the Specification:

Please replace the paragraph beginning at page 1, line 20 with the following rewritten paragraph:

-- More recently, polarized fluorescence was used for analysis of labelled nucleic acid sequences. So, let us cite the article, "Fluorescence Polarization in Homogenous Nucleic Acid Analysis" by Chen, Levine and Kwok, Genome Research, 09/98, and the article, "A homogeneous method for genotyping with fluorescence polarization", by Neil J. Gibson, Helen L. Gillard, David Whitcombe, Richard M. Ferrie, Clive R. Newton and Stephen Little, Clinical Chemistry 43: 8, 1336-1341.--

Please replace the paragraph beginning at page 2, line 1 with the following rewritten paragraph:

-- "Fluorescence Anisotropy: Rapid, Quantitative Assay for Protein-DNA and Protein-Protein Interaction" by Tomasz Heyduk, Yuexing Ma, Hong Tang and Richard H. Ebright, Methods in Enzymology, Vol. 274, and --

Please replace the paragraph beginning at page 2, line 18 with the following rewritten paragraph:

-- A great number of devices for implementing fluorescence polarization measurements are known from the prior art. For instance, spectrophotometers provided with polarization accessories may be mentioned. The investigated spectra are then spectra from monochromators, in front of which are placed polarization filters. White light is vertically polarized before reaching the sample and the sample's fluorescence is alternately analyzed with vertical then horizontal polarization. The degree of polarization is given by the formula below:--

Please replace the paragraph beginning at page 3, line 5 with the following rewritten paragraph:

-- These spectra have the advantage of allowing the whole spectral range to be explored, both in emission and in excitation. However, they lack sensitivity as the monochromators have very selective films with a relatively high attenuation.--

Please replace the paragraph beginning at page 3, line 16 with the following rewritten paragraph:

-- There are also investigation benches with two simultaneous channels. Now, n measurement points may be scanned, but this requires mechanical motion and a synchronization device which make implementation delicate for these benches in an industrial environment.--

Please replace the paragraph beginning at page 7, line 3 with the following rewritten paragraph:

C7

-- With optics 10 and polarizing filters 6 and 7, the N parallel microchannels may be imaged on a CCD (Charge Coupled Device) camera 8. As a non-limiting example, polarizing filters 6 and 7 are mounted on a filter wheel 9. The fluorescence light F from the N microchannels is then detected. The imaging of the N microchannels is performed, first of all according to a first direction of polarization then according to the direction perpendicular to the first direction of polarization. Two channel intensities I// and $I_{\perp}$ are thereby obtained, channel by channel. The resulting polarization is given by:--

Please replace the paragraph beginning at page 7, line 21 with the following rewritten paragraph:

C8

-- According to this second example, two different tracers are imaged. For example, they may be R110 and TAMRA as mentioned earlier. The device comprises an objective lens 10, a CCD camera 8 and four polarizing filters 11, 12, 13 and 14 mounted on a filter wheel 15. Filters 11 and 12 filter the vertical polarization and the horizontal polarization of the fluorescent light from a first tracer, respectively and filters 13 and 14 filter the vertical polarization and the horizontal polarization of the fluorescent light from the second tracer, respectively. The respective intensities I//R110, $I_{\perp}$LR110, I//TAMRA and $I_{\perp}$TAMRA are then successively measured by camera 8. For this purpose, the filter wheel 15 is switched with both excitation laser beams (not shown in the figure) synchronously, which successively illuminate the microchannels.--